Ez-S316-3D-Scanner Quick User Guide

Ez-S316-3D-Scanner is a MS Windows application that provides a GUI Interface to real-time display the depth map, RGB image, and color point cloud from the EzS316, a Sony TOF based (RGBD) camera.

Fig 1 EzS316 RGBD camera

Download the codes

https://github.com/kevinliu-ez/Ez-S316-3d-scanner

Setup:

- Hardware:
  a. Plug the USB DC power supply into a power outlet.
  b. Connect a USB 3.0 cable from the EzS316 RGBD camera device to your MS Windows computer.
  c. Connect a USB 2.0 cable from the USB DC power supply to the EzS316 RGBD camera device.

  The current configuration of the device is optimized for static scenes, a tripod is recommended for holding the device.
- Software:
  a. Install the MS Visual C++ Redistributable for Visual Studio 2015 (If necessary).
  b. Run Ez-S316-3DScanner.exe in the folder: \Ez-S316-3D-Scanner.

Usage:

Please run the application located at '**Ez-S316-3D-Scanner\Ez-S316-3DScanner.exe**'. The Ez-S316-3D Scanner is a GUI Interface to real-time display the depth map, RGB image, and 3D point cloud from the EzS316 RGBD camera device.

Referring to Fig 2, the GUI can be separated to 3 parts: camera control user interface, message, and display area.

- In camera control area, user can “Connect/Stop” the camera,
- “Enable/Disable” ORB-SLAM2 and 3D point cloud display functions, using bounding box user interface to control the 3D point cloud display area,
- using “3D scan” to scan the object and save the 3D Point Cloud.

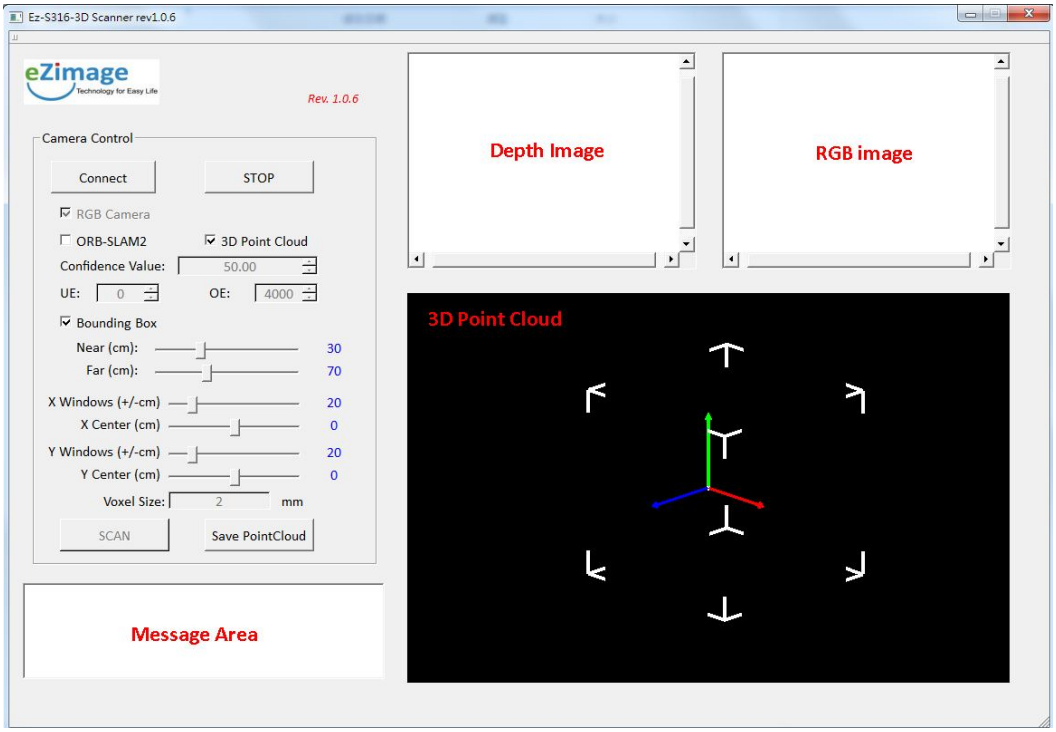


Fig 2 Ez-S316 3D Scanner GUI Interface

Connect the Camera

Push “Connect” button, the EzS316 RGBD camera 3D Camera will be linked automatically, after link, the depth and RGB image will be real-time displayed in depth and RGB window. If the “3D point cloud” has been checked, the 3D point cloud with RGB+D fusion will be displayed in 3D window.

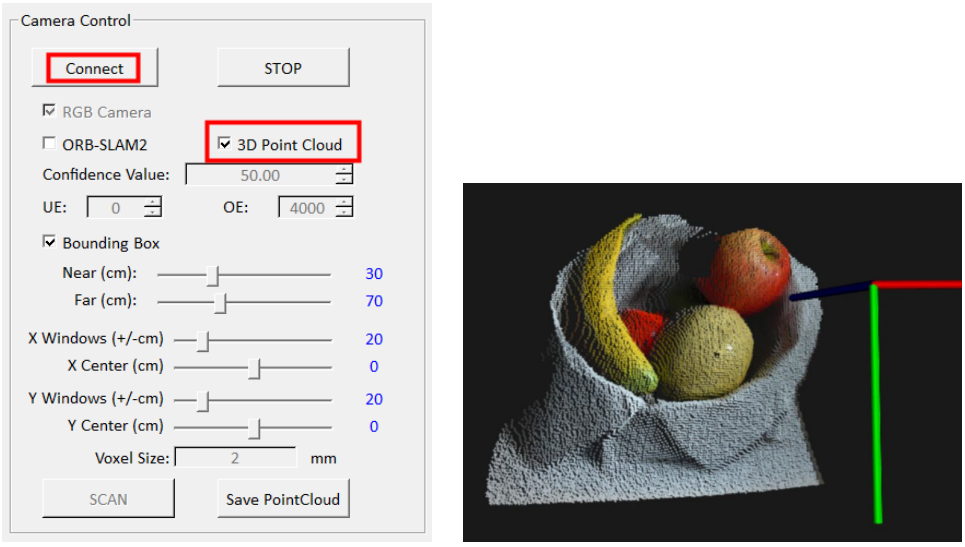
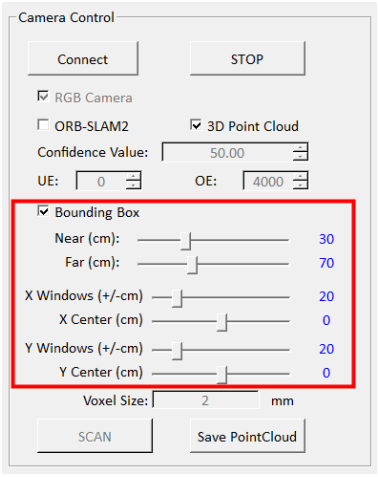


Fig 3 Connect the Camera

Bounding Box

User can using the slider bar to control the 3D point cloud display area in X/Y/Z direction. In 3D window, a white cubic frame will also interact in real-time when user slide the slider bar.



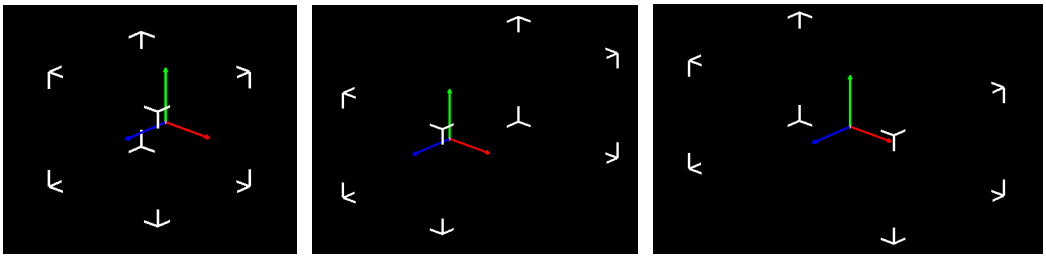


Fig 4 Bounding Box control

Stop Camera

Push “STOP” button to disconnect the EzS316 RGBD camera 3D Camera.

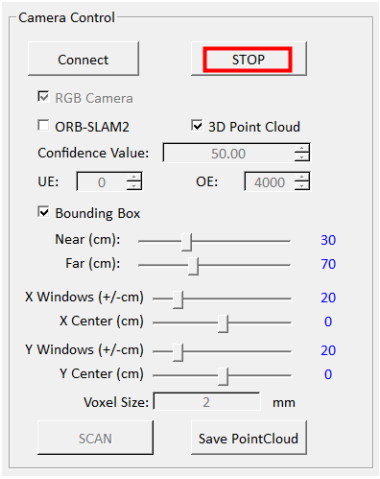


Fig 5 Stop Camera

Contact information

eZimage Technology Co., LTD (易積生活科技股份有限公司)

Contact window: Kevin Liu

Tel: 886-2-82525881
Fax: 02-2225-0132
Mobile: 0919 377901
Email: kevinliu@ezimage-tech.com